(19) World Intellectual Property Organization International Bureau



Not classified

(43) International Publication Date 29 June 2006 (29.06.2006)

(10) International Publication Number WO 2006/067558 A2

(51) International Patent Classification:

(21) International Application Number: PCT/IB2005/003207

(22) International Filing Date: 27 October 2005 (27.10.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2004-314705 28 October 2004 (28.10.2004)

(71) Applicant (for all designated States except US): NISSAN MOTOR CO. LTD. [JP/JP]; No.2 Tama-cho, Kangawa-ku, Yokohama-shi, Kanagawa-ken (JP).

(72) Inventors; and

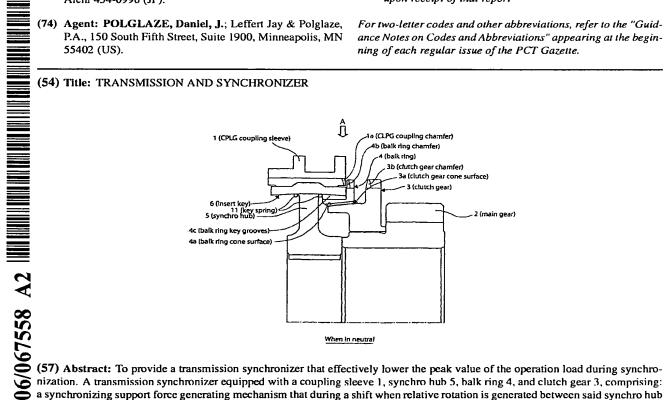
- (75) Inventors/Applicants (for US only): MASASHI, Yoshino [JP/JP]; 3-2-3-102 Minamirinkan, Yamato-shi, Kanagawa 242-0006 (JP). AKIHIRO, Miyamoto [JP/JP]; 1-306 Fushiya, Twin Sakae A202, Nakagawa-ku, Nagoya-shi, Aichi 454-0996 (JP).
- (74) Agent: POLGLAZE, Daniel, J.; Leffert Jay & Polglaze,

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report



nization. A transmission synchronizer equipped with a coupling sleeve 1, synchro hub 5, balk ring 4, and clutch gear 3, comprising: a synchronizing support force generating mechanism that during a shift when relative rotation is generated between said synchro hub 5 and said balk ring 4 by a minute synchronizing torque generated between balk ring cone surface 4a and clutch gear cone surface 3a, converts a circumferential force induced by said relative rotation to an axially applied synchronizing support force, with which said balk ring 4 is pressed against said clutch gear 3; and a relative rotation regulating structure that is located between said balk ring 4 and said synchro hub 5, and when in neutral, regulates the amount of relative rotation between said balk ring 4 and said synchro hub 5 so that said synchronizing support force is not generated.

